

IN THE CLAIMS

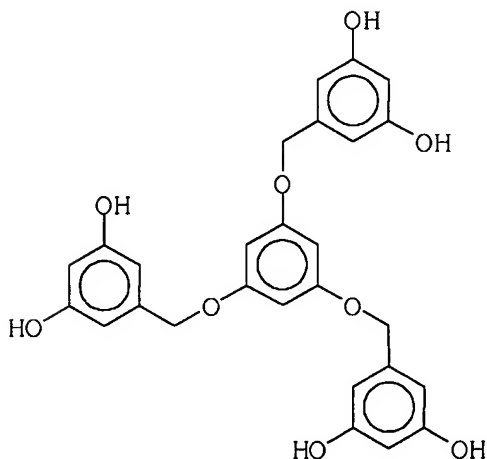
1.(Currently Amended) A non-linear optical material, comprising:

organic chromophores coupled with the ends of a polymer having a dendrimer structure based on ester linkages and/or ether linkages.

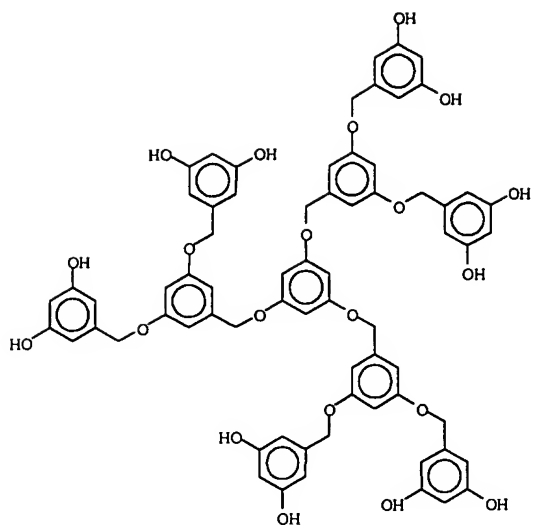
2.(Currently Amended) The non-linear optical material as recited in claim 1, wherein the polymer couples to said chromophore at a pendant OH group forming an ester or ether linkage; and

the polymer having a dendrimer structure is any one selected from ~~a~~the group consisting of polymers; illustrated ~~in~~is Formulas 21, 23, 28, 6, 12, 16, 29, 8, 14, 18, 30, 25, 27 and 31:

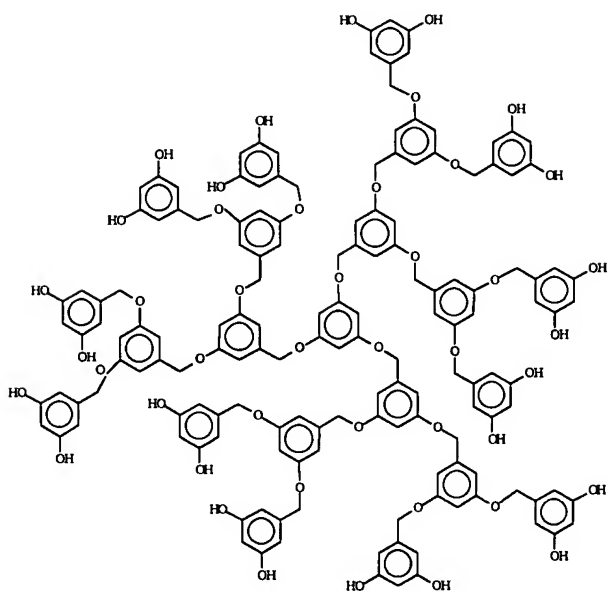
Formula 21



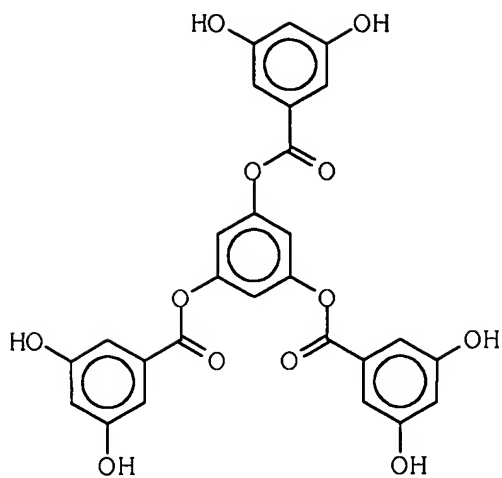
Formula 23



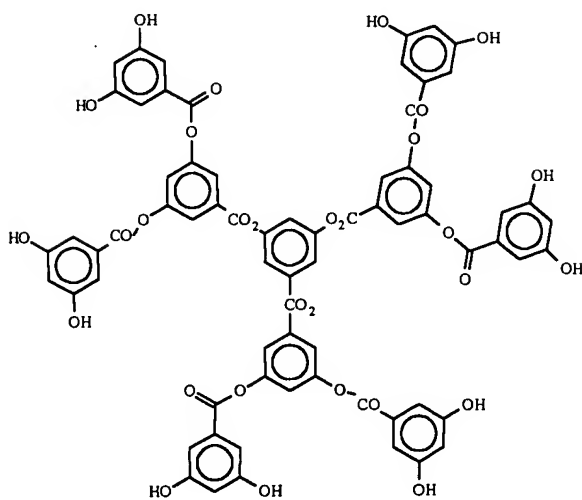
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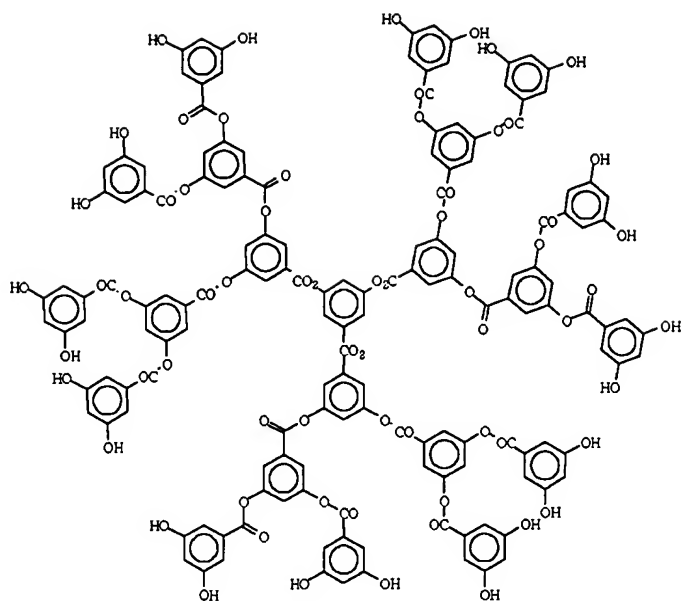
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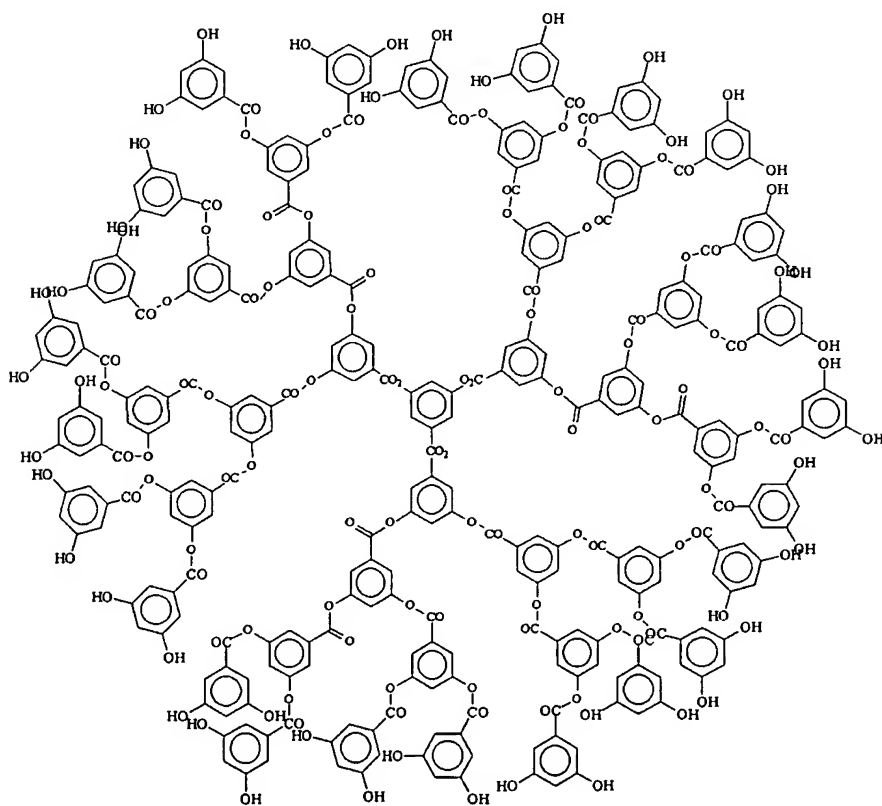
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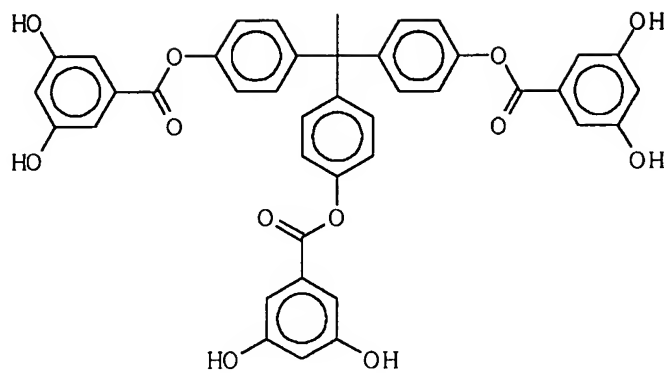
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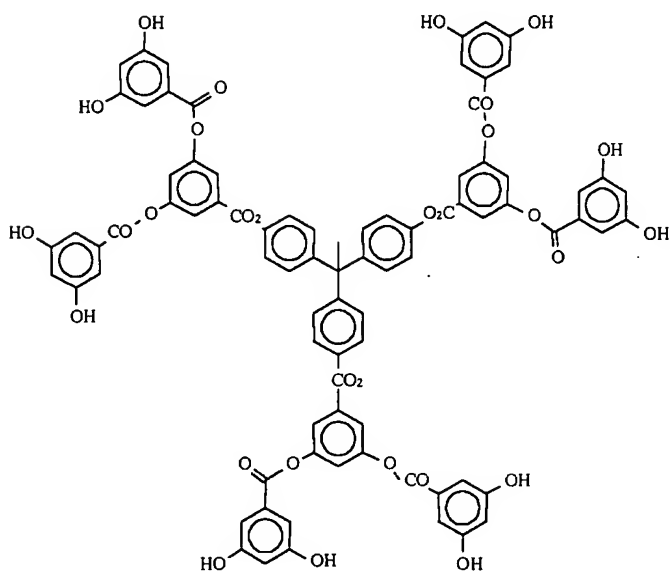
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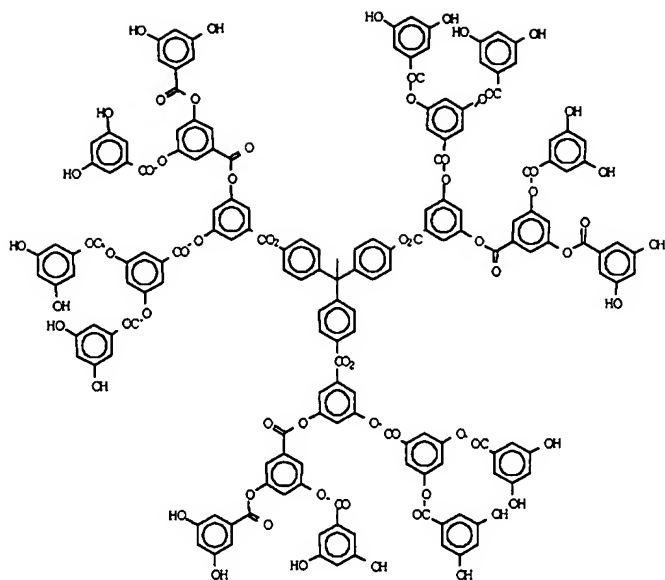
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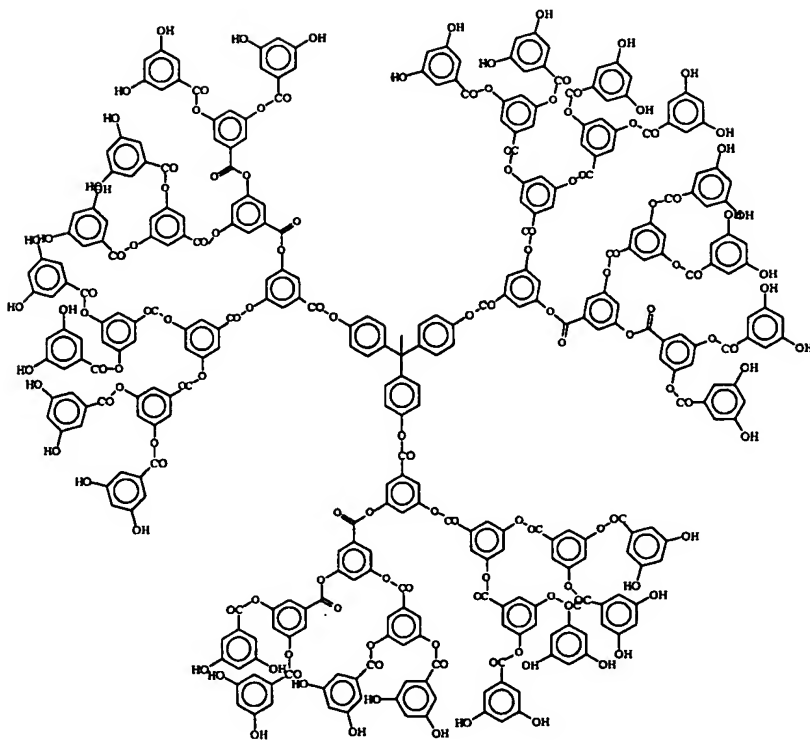
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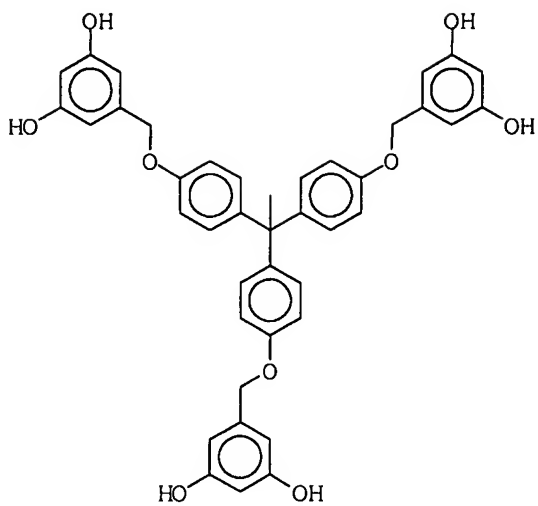
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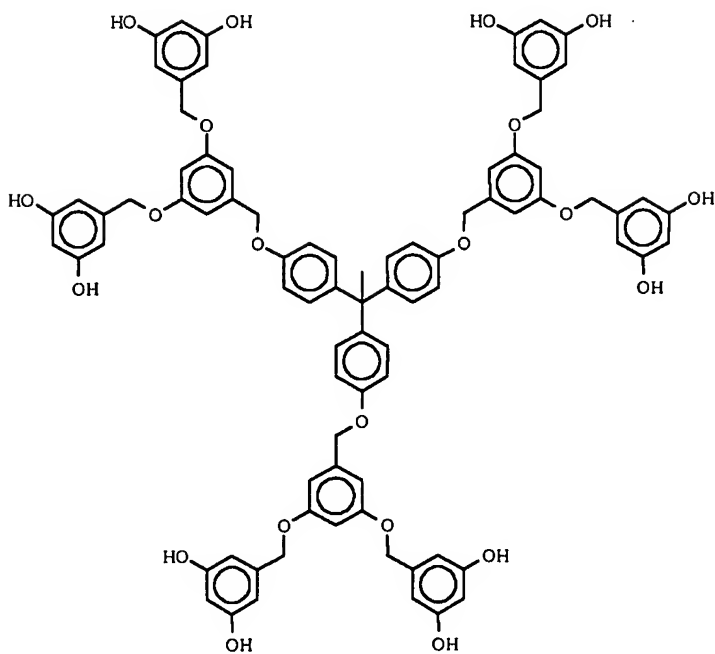
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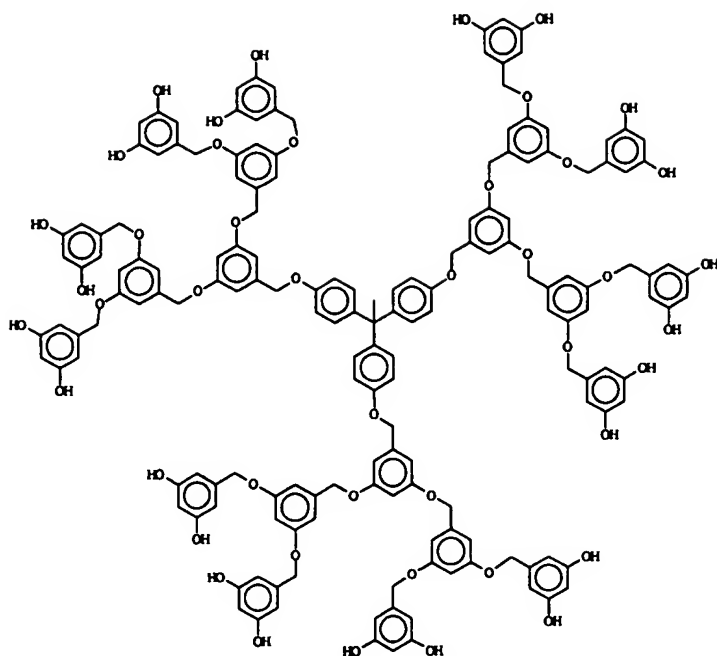
Formula 25



Formula 27



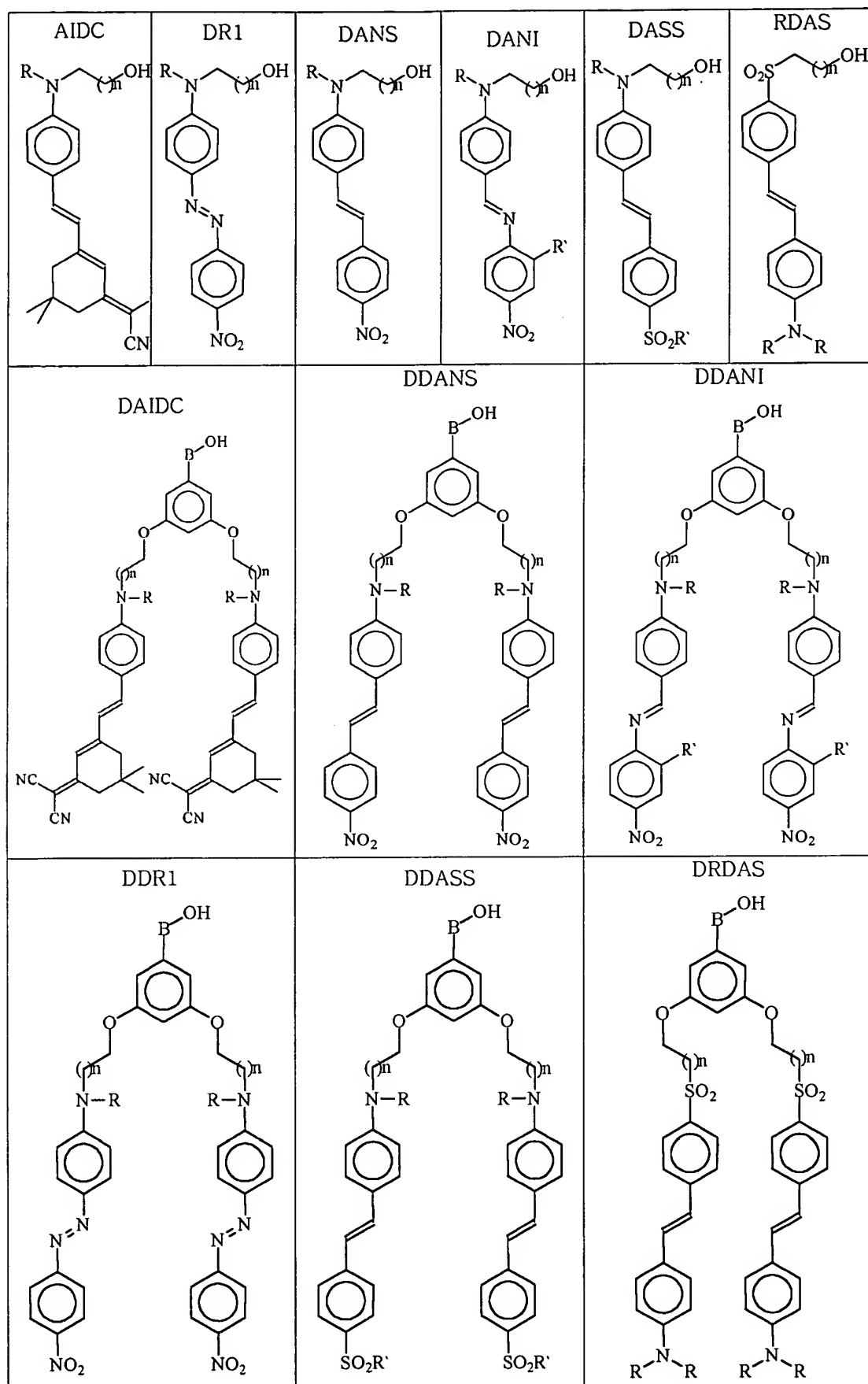
Formula 31



3.(Currently Amended) The non-linear optical material as recited in claim 1, wherein the chromophore couples to said polymer at the pendant OH group forming an ester or ether linkage; and

wherein the organic chromophores are any one selected from the group of organic chromophores illustrated in Table 1 shown as:

Table 1



wherein the R and R' are H, a phenyl group or an alkyl group having 1 to 6 carbon atoms;

n is an integer in a range of 1 to 11; ~~and~~

B is an alkyl group having 1 to 6 carbon atoms or a COOA where A is an alkyl group having 1 to 6 carbon atoms.

4.(Currently Amended) The non-linear optical material as recited in claim 1, wherein ~~part~~ some of the ends of the polymer having a dendrimer structure is coupled with non-chromophores.

5.(Original) The non-linear optical material as recited in claim 4, wherein the non-chromophores are aliphatic hydrocarbons or aromatic hydrocarbons which have 1 to 16 carbon atoms.

6.(Original) The non-linear optical material as recited in claim 5, wherein the aromatic hydrocarbons have chemical functional groups connected thereto, the chemical functional groups inducing thermal and optical chemical reactions.